An Application Guide for

Granting Waivers from State On-Site Sewage System Regulations

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Washington State Department of
Health

Office of Environmental Health & Safety
Wastewater Management Program
New Market Industrial Center
7171 Cleanwater Lane, Building 4
PO Box 47825
Olympia, Washington 98504-7825

Tel: 360.236.3062
FAX: 360.236.2261
Webpage: http://www/doh.wa.gov/ehp/ts/waste.htm

Granting Waivers from State On-Site Sewage System Regulations

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Introduction

As a result of State Board of Health rule (Chapter 246-272 WAC) adoption in 1995, and the incorporation of the waiver requirements into statute (RCW 70.05), the Department of Health (DOH) developed a process by which waivers may be granted from the state on-site sewage regulations. This process is intended to assure that all waivers granted by the local health officer are consistent with the standards in and intent of, the state board of health rules. The procedural framework maintains public health protection at least equal to the level established by the provisions in Chapter 246-272 WAC On-Site Sewage Systems.

This manual is furnished to serve as a guide to local health department staff who are involved in evaluating and granting waivers from state regulations, and to clarify the review process and reporting requirements. The standards that are referenced in this manual for approved mitigation measures are performance-based or design-specific technical specifications and related management practices for on-site sewage systems or components of on-site sewage systems. These standards are intended to provide, as far as practicable, uniformity of practice. They are based on standard engineering practice, and are deemed the best technical documents based on available information.

Technical questions pertaining to DOH waiver requirements, as well as questions regarding waiver process contact:

John Eliasson
Wastewater Management Specialist
WA State Department of Health
Office of Environmental Health & Safety
P.O. Box 47825
Olympia, WA 98504-7825
Phone: 360/236-3041 Fax: 360/236-2261
E-mail: john.eliasson@doh.wa.gov

Section 1: Background

Brief History

On December 14, 1994, the State Board of Health (SBOH) passed an emergency rule that amended Chapter 246-272-25001 WAC, the waiver procedures for the On-Site Sewage Regulations. The emergency rule was passed in response to a specific request the Board of Health received from three Washington State Senators concerning issues expressed by some constituents in their legislative districts.

Responding to the specific request for change, the SBOH added and deleted language to WAC 246-272-25001, providing the following results:

- The "Site-by-Site Waiver" provision was retained.

Requirements retained:

- Local Health Officer authority to grant waiver.
- Waivers must be consistent with the purpose and objectives to meet the public health intent of the rules.
- Concurrence with Local Health Officer action must be granted by DOH.
- Waiver authority and procedure for DOH to waive requirements of the rules for Large On-Site Sewage Systems (LOSS) which are the jurisdiction of DOH.

Requirements added:

- Quarterly reporting to DOH by Local Health Officers regarding waiver activity.

Requirements deleted:

- A Site-by-Site Waiver processing procedure that directly involved the citizen applicant, the Local Health Officer and DOH, and the payment of a fee to cover the cost of the departmental review and concurrence.
- The "Multiple-site Waiver" provision was eliminated.

On May 5, 1995, enacted legislation placed the waiver provisions found in WAC 246-272 into statute (RCW 70.05). The statute paralleled waiver language in WAC 246-272, although not including reference to DOH "concurrence" that is part of the rule, it clarified the process, which involves DOH oversight and technical assistance, that is currently followed to assure concurrence. It also provided for suspension of waiver authority if problems are not corrected after DOH technical assistance is provided.

Section 2: Basic Concepts

What's Different

With these changes made to the options and process/procedure for Waiver of State Regulations, DOH completed the new scheme for granting waivers within the general direction provided in the new rule and statute (See Appendix A- RCW 70.05.072 and WAC 246-272-25001). Several key elements are identified to provide the framework:

- Authority and responsibility for granting waivers rests with the Local Health Officer.
- Waivers may be considered and granted only on a "site-by-site" basis.
- Only those waivers that are consistent with the public health protection provided by the state rules may be granted.
- Quarterly reporting by the Local Health Officers to DOH regarding any waivers approved or denied is required.
- The Local Health Officer's authority to grant waivers may be suspended if inconsistencies are not corrected after DOH technical assistance is provided.

Statewide Standards for Public Health Protection

The Washington State Board of Health (SBOH) On-Site Sewage System rules (Chapter 246-272 WAC) encompasses the minimum statewide standards for public health protection. Implemented by local health jurisdictions and by the state department of health, the rules were developed for statewide application.

The on-site sewage system rules provide minimum standards and operational framework for on-site sewage treatment and disposal, including technical specifics for siting, use, and design, installation, permitting, repair of failures, minimum land area, and operation and maintenance. These standards and requirements are established to assure adequate treatment and safe disposal of sewage, providing protection of public health and water quality. As it is unlikely that the rules apply equally well to all sites encountered in the state, waiver of these rules is provided through a process in which DOH provides assurance and oversight.

Mitigation-Based Waiver

Waivers of state regulations may be granted only when the local health officer determines that the requested waiver is consistent with the standards in, and the intent of, the public health protection purpose and objectives of the rules. As the rules provide the minimum standards for public health and water quality protection, any waiver, or "set-aside" of any portion of the rules must provide a corresponding mitigation measure(s) to assure that public health and water quality protection at least equal to that established by the rules, is provided. Only in rare instances, where the resulting risk to public health or water quality is not increased, is waiving minimum standards without appropriate mitigation measures allowed.

Conceptual Framework for Waiver Process

The following conditions must be met by the local health jurisdiction to maintain consistency between the waivers granted and the standards in, and intent of WAC 246-272:

- Site-by-Site application of the state rules, review and granting of waivers. (Each site and proposed design / development must be considered independently. Local waiver judgment is to be made on a site-by-site basis, as opposed to, for example, "all 45 lots in this subdivision").

- Local waiver decisions made by qualified and authorized personnel. (These persons must have knowledge of the principles, and the state / local processes for "mitigation-based" waivers, and specific written authorization by the Local Health Officer.)

- Waivers must be based on the criteria established, and guidance materials provided by DOH. (This will help assure that an equal level of protection of public health and water quality is provided throughout the statewide network of 34 local health jurisdictions).

- Timely, complete, and accurate reporting to DOH. (Local record keeping and documentation of waiver activity, needs to be filed for easy retrieval and open to local program quality assurance review by DOH).

Functional Framework for Waiver Process

In overview, the process for granting waivers from state on-site sewage system regulations involves the following steps (See Figure 1 for a schematic of the process):

- The Local Health Officer reviews a waiver request for a site / development, measuring the proposed waiver mitigation measures against the general provision that consistency with the public health protection intent of the on-site sewage system rules is maintained.

- Local Health Officer review of a waiver request, decision to grant, and the assurance of consistency with the rules is aided by specific waiver evaluation criteria and mitigation measures provided by DOH through a waiver classification scheme. The Local Health Officer may choose from three various classes of waivers:

  - **Class A** - A waiver for which specific waiver request evaluation criteria and mitigation measures have been "pre-approved" by DOH on a state-wide basis.

  - **Class B** - A waiver for which a local health agency, with agreement by DOH, has established specific waiver request evaluation criteria and mitigation measures to address specific local conditions or issues in an individual county or jurisdictional area.

- **Class C** - A waiver for which no specific waiver request evaluation criteria or pre-approved mitigation measures have been developed. Before a Class C waiver request is decided, the Local Health Officer must establish appropriate specific waiver request evaluation criteria against which proposed mitigation measures are judged. While not required, Local Health Officer consultation with DOH prior to granting a Class C waiver is strongly recommended.

- If the waiver request is granted by the Local Health Officer, rule consistency is assured by the local application of specific evaluation criteria and/or mitigation measures provided in DOH reference materials; and adherence to the principles and public health protection mandate of the waiver provisions demonstrated by:

  - Waivers granted only by qualified and authorized health agency staff who have wastewater management training and continuing education, including the completion of this Application Guide for Granting Waiver from State On-Site Sewage Systems Regulations.

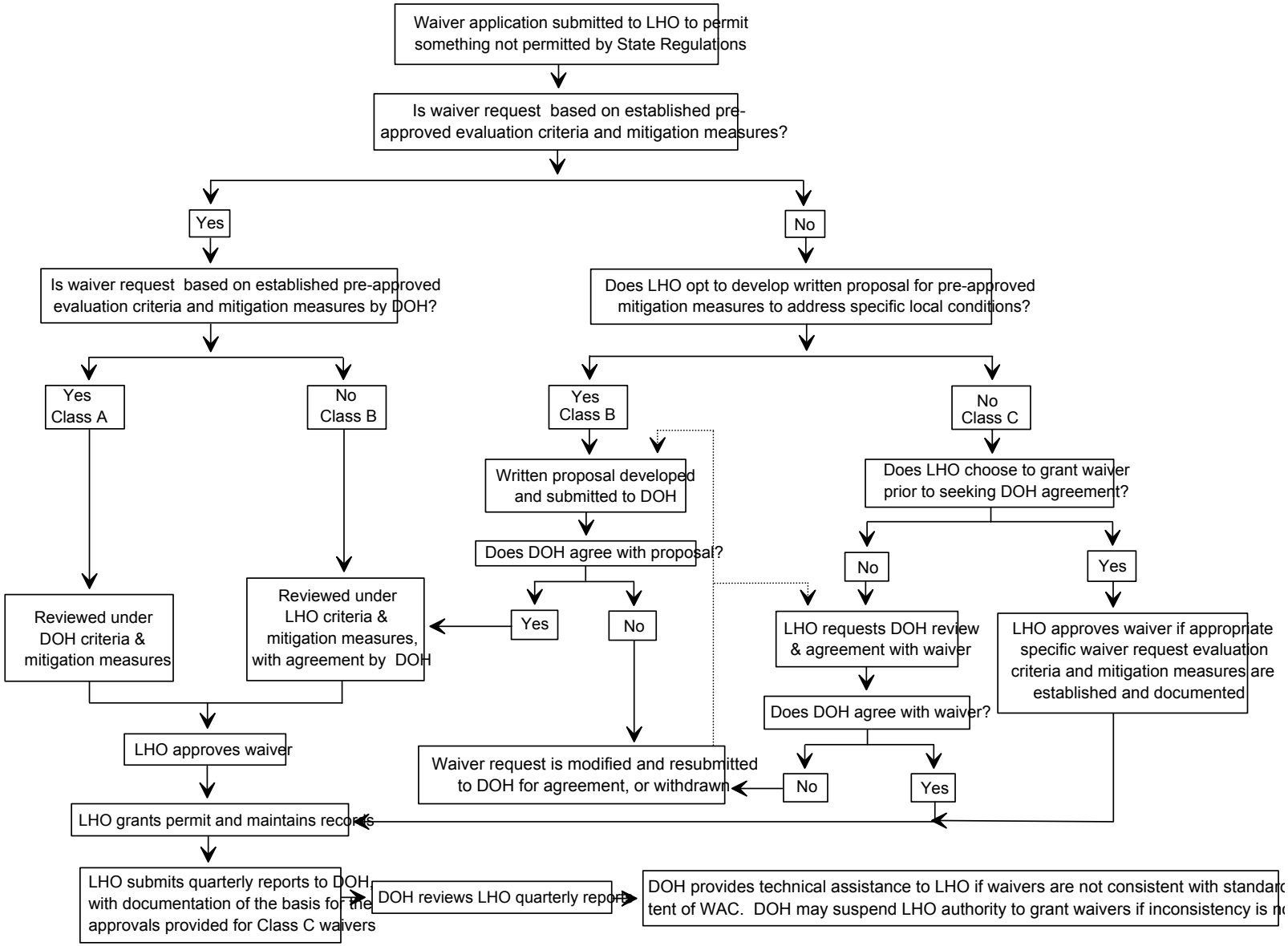
  - Quarterly reporting developed and submitted by Local Health Officer to DOH, and,

  - Quarterly reporting reviewed by DOH with technical assistance provided for oversight and assurance of local waiver activities.

- The Local Health Officer provides quarterly reports to DOH on the waiver of state regulation activity in his/her jurisdiction. Consistency of local document recording and regular reporting to DOH is assisted by standardization of information recorded through the use of DOH report format and forms (See Appendix B - Waiver Forms).

DOH provides, as needed, technical assistance to the Local Health Officer to correct the inconsistencies found in the review of quarterly waiver reports. If any inconsistency between the waiver grants and the state standards has not been corrected, the department may suspend the authority of the local officer to grant waivers. The Local Health Officer may not, then, grant waivers from the state regulations until the inconsistencies have been corrected.

Figure 1. Evaluation of Site-By-Site Waiver Requests of State Regulations



Section 3: Classes of Waivers

Class A

A waiver for which review criteria and mitigation measures have been pre-approved by the Department of Health on a statewide basis (See Tables 1-4. Class A - Pre-Approved Review Criteria and Mitigation Measures on pages 9-14).

- DOH agreement with individual waivers approved by qualified/authorized local health department practitioners can be assumed if pre-approved review criteria and mitigation measures are applied.
- Records of Class A waivers will be maintained by local health agencies and made available to DOH upon request.
- Local health departments will submit quarterly reports concerning Class A waivers granted and the review criteria and mitigation measures applied.

Class B

A waiver for which a local health agency and DOH have established pre-approved review criteria and mitigation measures to address specific local conditions or issues in an individual county or jurisdictional area.

- DOH agreement with individual waivers approved by qualified /authorized local health agencies practitioners can be assumed if pre-approved review criteria and mitigation measures are applied.
- Class B Waivers, with their review criteria and mitigation measures, are proposed by a local health agency and reviewed and approved by DOH, prior to their application,
- DOH wastewater program staff are available for consultation to assist the development of Class B Waivers and appropriate review criteria and mitigation measures. The amount of proposal-support documentation will vary with the complexity of the issues surrounding the specific waiver. Prior to DOH approval and local health agency application of a Class B Waiver, a written proposal is developed by the local health agency and submitted to DOH.
- A proposal must describe the specific requirements to be waived, the review criteria to be used and site/design/administrative mitigation measures to be employed to provide an equal level of public health protection, and technical / public health protection justification for the proposed actions. Also, provide, if applicable, the anticipated methods of verification that the mitigation measures proposed/used provide the level of public health protection needed.

- Based on discussions with the local health agency and review of the written proposal, DOH will either agree with the proposal, request additional information, or determine that waivers advocated by the proposal would be inconsistent with the intent of the State Board of Health on-site sewage regulations. Class B waivers may be granted by the local health officer only after DOH agrees with the proposed review criteria and mitigation measures. Denial of proposal may be appealed.

- Records of Class B waivers will be maintained by local health agencies and available to DOH upon request.

- Local health agencies will submit quarterly reports concerning the Class B waivers granted and the review criteria and mitigation measures applied.

Class C

A waiver for which no pre-approved review criteria and mitigation measures have been developed; Department of Health approval for review criteria and mitigation measures can be secured on a case-by-case basis.

- DOH must grant agreement for each waiver individually. The agreement may be obtained either prior to local health agency approval in consultation with DOH or after local health agency granting through the quarterly reporting process. (Advance agreement is strongly recommended.)

- Local health departments may consult with DOH regarding a waiver/review criteria and mitigation proposal to discuss the adequacy of technical justification, review criteria, site/ design/administrative mitigation measures, and verification methods. DOH may either agree with the proposal, request additional information, or determine that the proposed waiver and review criteria and mitigation measures would be inconsistent with the intent of the State Board of Health on-site sewage regulations.

- A local health department may grant a waiver prior to securing agreement of DOH. In such instances, the local health jurisdiction must submit, with the next quarterly report, complete documentation of the basis for the waiver including, as applicable, technical justification, review criteria, site/design/administrative mitigation measures, and proposed methods of verification.

- Class C Waivers, with their review criteria and mitigation measures, upon agreement by DOH, may be considered for inclusion on the local/state pre-approved Class B Waiver options list for the health jurisdiction. Any subsequent application for waiver for the same portion of the state regulations could then be treated as a Class B waiver application within the applicable county or jurisdiction.

Table 1. Class A NON-PERFORATED DISTRIBUTION LINE HORIZONTAL SEPARATIONS (3/99)

WAC Section	Specific Item Waived	Extent or Degree Waived	Minimum Issues/Criteria to Consider	Approved Mitigation Measures*
246-272-09501(1)	Pressure sewer transport line 10 feet from surface water	Subaqueous crossing of pressure sewer transport line or down to 0 feet horizontally	**1)** Extra protection of integrity of line at crossing	**1a)** Transport line installed in a casing of at least Schedule 40 steel or ductile iron pipe within 10 feet on each side of the crossing. Transport line uniformly supported by pressure-grouting annular space with sand-cement grout or bentonite, or casing spacers or skids installed consistent with AWWA PVC Pipe Design and Installation Manual M23-7-2. Underground installation of line consistent with ASTM D 2774.
				1b) Transport line buried at least 3 feet below the bottom of the water body's bed.
				1c) Transport line within 10^{o} of the perpendicular direction of the stream.
			2) Performance testing of line	**2a)** Transport line leakage test consistent with ASTM D 2774, except line should be pressurized to 150% of the system's design operating pressure, but not less than 70 psi, and pressure must hold for 1 hour.
			3) Other agencies requirements for surface water and fishery protection	**3a)** Submit JARPA to appropriate review agencies.
246-272-09501(1)	Pressure sewer transport line 10 feet from surface water	Aerial crossing of pressure sewer transport line or down to 0 feet horizontally	**1)** Extra protection of integrity of line at crossing	**1a)** Transport line installed in a casing of at least Schedule 40 steel or ductile iron pipe within 10 feet on each side of the crossing. Transport line uniformly supported by casing spacers or skids installed consistent with AWWA PVC Pipe Design and Installation Manual M23-7-2.
				1b) Transport line crossing designed by an engineer to prevent freezing, leaking, settlement, lateral movement, and damage from expansion/contraction.
				1c) Transport line located with proper clearance above floodwater conditions.
			2) Performance testing of line	**2a)** Transport line leakage test consistent with ASTM D 2774, except line should be pressurized to 150% of the system's design operating pressure, but not less than 70 psi, and pressure must hold for 1 hour.
			3) Other agencies requirements for surface water and fishery protection	**3a)** Submit JARPA to appropriate review agencies.

* **The local health officer may require additional site-specific issues and criteria to consider, and mitigation measures.**

Table 1. Class A NON-PERFORATED DISTRIBUTION LINE HORIZONTAL SEPARATIONS (3/99)

WAC Section	Specific Item Waived	Extent or Degree Waived	Minimum Issues/Criteria to Consider*	Approved Mitigation Measures*
246-272-09501(1)	Pressure sewer transport line 50 feet from non-public well or suction line	Down to 25 feet	**1)** Extra protection of integrity of line within 50 feet of well	**1a)** Transport line installed in a casing of at least Schedule 40 PVC within 50 feet of well. Transport line uniformly supported by pressure-grouting annular space with sand-cement grout or bentonite, or casing spacers or skids installed consistent with AWWA PVC Pipe Design and Installation Manual M23-7-2. Underground installation of line consistent with ASTM D 2774.
			2) Performance testing of line	**2a)** Transport line leakage test consistent with ASTM D 2774, except line should be pressurized to 150% of the system's design operating pressure, but not less than 70 psi, and pressure must hold for 1 hour.
			3) Determination of existing rights of sanitary control; i.e. recorded covenants, easements.	**3a)** Permission required from the well owner to encroach on any established or implied sanitary control area.
246-272-09501(1)	Pressure sewer transport line 10 feet from a single service pressurized water supply line	Pressure sewer transport line subsurface crossing of pressurized water line or down to 5 feet horizontally in parallel construction	**1)** Extra protection of integrity of line or lines at crossing	**1a)** Transport line installation consistent with WSDOE 1998 Criteria for Sewage Works Design Section C1-9. Transport line uniformly supported by pressure-grouting annular space with sand-cement grout or bentonite, or casing spacers or skids installed consistent with AWWA PVC Pipe Design and Installation Manual M23-7-2.
				1b) Underground installation of lines consistent with ASTM D 2774.
			2) Performance testing of the line or lines	**2a)** Transport line leakage test consistent with ASTM 2774, except line should be pressurized to 150% of the system's design operating pressure, but not less than 70 psi, and pressure must hold for 1 hour.
246-272-09501(1)	Building sewer, collection, non-pressure non-perforated distribution line 50 feet from non-public well or suction line	Down to 25 feet	**1)** Extra protection of integrity of line within 50 feet of well	**1a)** Line installed in a casing of at least Schedule 40 PVC pipe within 50 feet of well. Transport line uniformly supported by pressure-grouting annular space with sand-cement grout or bentonite, or casing spacers or skids installed consistent with AWWA PVC Pipe Design and Installation Manual M23-7-2.
				1b) Underground installation of line consistent with ASTM D 2321.
			2) Performance testing of line	**2a)** Line leakage test consistent with ASTM F 1417 or exfiltration test consistent with WSDOT 7-17.3(2)B.
			3) Determination of existing rights of sanitary control; i.e. recorded covenants, easements.	**3a)** Permission from the well owner to encroach on any established or implied sanitary control area.

- **The local health officer may require additional site-specific issues and criteria to consider, and mitigation measures.**

Table 2 CLASS A SEWAGE TANK HORIZONTAL SEPARATIONS (3/99)

WAC Section	Specific Item Waived	Extent or Degree Waived	Minimum Issues/Criteria to Consider*	Approved Mitigation Measures*
246-272-09501(1)	Tank 50 feet from surface water	Down to 25 feet	**1)** Extra protection of integrity of tank and joints	**1a)** Waterproof surface barrier applied to concrete tank consistent with Manual of Concrete Practice ACI 515.1R. Flexible rubber boots or compression seals meeting ASTM C923, or flexible couplings meeting ASTM C 1173 used for inlet and outlet connections to provide flexibility in case of tank settlement while still maintaining a watertight seal. An approved double-wall fiberglass tank may be used in lieu of a concrete tank.
			2) Performance testing of tank	**2a)** Concrete tank leakage test consistent with ASTM C 1227. Fiberglass tank leakage test consistent with IAPMO PS 1-93.
			3) Accessibility of tank for ease of operation and maintenance	**3a)** Access openings at or above finished grade with lockable lids or secured to prevent unauthorized entry.
246-272-09501(1)	Tank 50 feet from non-public well or suction line	Down to 25 feet	**1)** Extra protection of integrity of tank and joints	**1a)** Waterproof surface barrier applied to concrete tank consistent with Manual of Concrete Practice ACI 515.1R. Flexible rubber boots or compression seals meeting ASTM C923, or flexible couplings meeting ASTM C 1173 used for inlet and outlet connections to provide flexibility in case of tank settlement while still maintaining a watertight seal. An approved double-wall fiberglass tank may be used in lieu of a concrete tank.
			2) Performance testing of tank	**2a)** Concrete tank leakage test consistent with ASTM C 1227. Fiberglass tank leakage test consistent with IAPMO PS 1-93.
			3) Accessibility of tank for ease of operation and maintenance	**3a)** Access openings at or above finished grade with lockable lids or secured to prevent unauthorized entry.
			4) Determination of existing rights of sanitary control; recorded covenants, easements	**4a)** Permission from well owner to encroach on any established or implied sanitary control area.
246-272-09501(1)	Tank 10 feet from pressured water supply line	Down to 2 feet	**1)** Extra protection of integrity of tank and joints	**1a)** Waterproof surface barrier applied to concrete tank consistent with Manual of Concrete Practice ACI 515.1R. Flexible rubber boots or compression seals meeting ASTM C923, or flexible couplings meeting ASTM C 1173 used for inlet and outlet connections to provide flexibility in case of tank settlement while still maintaining a watertight seal. An approved double-wall fiberglass tank may be used in lieu of a concrete tank.
			2) Performance testing of tank	**2a)** Concrete tank leakage test consistent with ASTM C 1227. Fiberglass tank leakage test consistent with IAPMO PS 1-93.
			3) Accessibility of tank for ease of operation and maintenance	**3a)** Access openings at or above finished grade with lockable lids or secured to prevent unauthorized entry.
			4) Extra protection of integrity of water line	**4a)** Water line installed in casing of at least Schedule 40 PVC within 10 feet of the tank. Water line uniformly supported by pressure-grouting annular space with sand-cement grout or bentonite, or casing spacers or skids installed consistent with AWWA PVC Pipe Design and Installation Manual M23-7-2.

* **The local health officer may require additional site-specific issues and criteria to consider, and mitigation measures.**

Table 3. CLASS A DISPOSAL COMPONENT HORIZONTAL SEPARATIONS (3/99)

WAC Section	Specific Item Waived	Extent or Degree Waived	Minimum Issues/Criteria to Consider*	Approved Mitigation Measures*
246-272-09501(1)	Disposal component 75 feet from surface water	Down to 50 feet	**1)** Enhanced treatment performance	**1a)** Pretreatment system listed as meeting Treatment Standard 2 without add-on disinfection to meet the fecal coliform parameter requirement. The disposal component maintaining at least 3 feet vertical separation; i.e., sand filter followed by a gravity distribution SSAS with at least 3 feet of vertical separation or by a pressure distribution SSAS with at least 2 feet of vertical separation. A mound system, without a preceding TS 2 pretreatment system, but with at least 3 feet of available soil depth also is allowed.
			2) Performance assurance of treatment system	**2a)** Management program established, which assures the on-going proper operation and maintenance of the system.
			3) Hydrogeologic susceptibility	**3a)** Adequate protective site specific conditions existing, such as physical settings with low hydrogeologic susceptibility from contaminant infiltration; i.e. evidence of excessive depth to groundwater, down-gradient contaminant source, or outside a sensitive area.
246-272-09501(1)	Disposal component 75 feet from non-public well or suction line	Down to 50 feet	**1)** Enhanced treatment performance	**1a)** Pretreatment system listed as meeting Treatment Standard 2 without add-on disinfection to meet the fecal coliform parameter requirement. The disposal component maintaining at least 3 feet vertical separation; i.e., sand filter followed by a gravity distribution SSAS with at least 3 feet of vertical separation or by a pressure distribution SSAS with at least 2 feet of vertical separation. A mound system, without a preceding TS 2 pretreatment system, but with at least 3 feet of available soil depth also is allowed.
			2) Performance assurance of treatment system	**2a)** Management program established, which assures the on-going proper operation and maintenance of the system.
			3) Hydrogeologic susceptibility	**3a)** Adequate protective site specific conditions existing, such as physical settings with low hydrogeologic susceptibility from contaminant infiltration; i.e. evidence of confining layers and or aquitards separating potable water from the OSS treatment zone, excessive depth to groundwater, down-gradient contaminant source, or outside the zone of influence.
			4) Determination of existing rights of sanitary control; recorded covenants, easements	**4a)** Permission required from well owner to encroach on any established or implied sanitary control area.

*** The local health officer may require additional site-specific issues and criteria to consider, and mitigation measures.**

Table 3. CLASS A DISPOSAL COMPONENT HORIZONTAL SEPARATIONS (3/99)

WAC Section	Specific Item Waived	Extent or Degree Waived	Minimum Issues/Criteria to Consider	Approved Mitigation Measures*
246-272-09501(1)	Disposal component 10 feet from pressurized water supply line	Down to 5 feet	**1)** Extra protection of integrity of water line	**1a)** Water line installed in casing of at least Schedule 40 PVC within 10 feet of the disposal component. Water line uniformly supported by pressure-grouting annular space with sand-cement grout or bentonite, or casing spacers or skids installed consistent with AWWA PVC Pipe Design and Installation Manual M23-7-2.
			2) Performance testing of water line	**2a)** Water line leakage test consistent with WSDOT 7-11.3(11) Hydrostatic Pressure Test.
			3) Hydrogeologic susceptibility	**3a)** Adequate protective site specific conditions existing, such as physical settings with low hydrogeologic susceptibility from contaminant infiltration; i.e. deep, well-drained soils or down-gradient contaminant source.
246-272-09501(1)	Disposal component 30 feet from interceptor/ curtain drains/ drainage ditches down-gradient	Down to 15 feet	**1)** Enhanced treatment performance	**1a)** Pretreatment system listed as meeting Treatment Standard 2 without add-on disinfection to meet the fecal coliform parameter requirement. The disposal component having pressure distribution and maintaining at least 2 feet vertical separation; i.e. sand filter followed by a pressure distribution drainfield with at least 2 feet vertical separation.
			2) Performance assurance of treatment system	**2a)** Management program established, which assures the on-going proper operation and maintenance of the system.
246-272-09501(1)	Disposal component 25 feet from down-gradient cuts or banks with at least 5 feet of original soil above a restrictive layer	Down to 12 feet	**1)** Enhanced treatment performance	**1a)** Pretreatment system listed as meeting Treatment Standard 2 without add-on disinfection to meet the fecal coliform parameter requirement. The disposal component having pressure distribution and maintaining at least 3 feet vertical separation; i.e. sand filter followed by a pressure distribution drainfield with at least 3 feet vertical separation.
			2) Performance assurance of treatment system	**2a)** Management program established, which assures the on-going proper operation and maintenance of the system.
			3) Stability of bank or cut	**3a)** Evidence of slope stability.
246-272-09501(1)	Disposal component 50 feet from down-gradient cuts or banks with less than 5 feet of original soil above a restrictive layer	Down to 25 feet	**1)** Enhanced treatment performance	**1a)** Pretreatment system listed as meeting Treatment Standard 2 without add-on disinfection to meet the fecal coliform parameter requirement. The disposal component having pressure distribution and maintaining at least 2 feet vertical separation; i.e. sand filter followed by a pressure distribution drainfield with at least 2 feet vertical separation.
			2) Performance assurance of treatment system	**2a)** Management program established, which assumes the on-going proper operation and maintenance of the system.
			3) Stability of bank or cut	**3a)** Evidence of slope stability.

*** The local health officer may require additional site-specific issues and criteria to consider, and mitigation measures.**

Table 4. MISCELLANEOUS DESIGN PROVISIONS (3/99)

WAC Section	Specific Item Waived	Extent or Degree Waived	Minimum Issues/Criteria to Consider*	Approved Mitigation Measures*
246-272-12501(2)	Holding tank sewage system only for permanent uses limited to controlled, part-time, commercial usage situations.	Holding tank for other than part-time non-residential use	**1)** Holding tank design criteria	**1a)** Design criteria consistent with the Recommended Standards and Guidance for Holding Tank Sewage Systems, and tank on current "Approved List".
			2) Performance assurance of system	**2a)** Management program established, which assures the on-going proper operation and maintenance of the system.
246-272-11501(2)(k)(ii)	SSAS depth shall not exceed ten feet from the finished grade	Down to 20 feet in depth	**1)** Enhanced treatment performance	**1a)** Pretreatment with sand-lined bed/trench with disposal component installed into suitable soil consistent with the Recommended Standards and Guidance for Sand Lined Trench Systems.
			2) Performance assurance of treatment system	**2a)** Management program established, which assures the on-going proper operation and maintenance of the system.
			3) Hydrogeologic susceptibility	**3a)** Adequate protection site specific conditions existing, such as physical setting with low hydrogeologic susceptibility from contaminant infiltration. The point where the treated wastewater is applied to the soil for disposal must be within the zone of aeration.
246-272-11501(2)(k)(iii)	The sidewall below the invert of the distribution pipe is located in original, undisturbed soil	SSAS installed in unoriginal disturbed soil (installed in fill)	**1)** Enhance treatment performance	**1a)** Pretreatment system listed as meeting Treatment Standard 2 without add-on disinfection to meet the fecal coliform parameter requirement. The disposal component maintaining at least 3 feet vertical separation; i.e. sand filter followed by gravity distribution SSAS with a least 3 feet vertical separation or by pressure distribution SSAS with a least 2 feet of vertical separation.
			2) Performance assurance of treatment system	**2a)** Management program established, which assures the on-going proper operation and maintenance of the system.
			3) Hydrogeologic characteristics	**3a)** Evidence of soil stability, and soil (fill material) displays suitable hydraulic conductivity.
246-272-11501(2)(g)	SSAS beds are only designed in Soil Types 2A, 2B, or 3, with a width not exceeding 10 feet	Allow bed in Soil Type 4-6, with a width not exceeding 10 feet	**1)** Enhance treatment performance	**1a)** Pretreatment system listed as meeting Treatment Standard 2 without add-on disinfection to meet the fecal coliform parameter requirement. The SSAS bed maintaining at least 3 feet vertical separation; i.e. sand filter followed by gravity distribution bed with a least 3 feet vertical separation (pressure distribution with 2 feet of vertical separation allowed). Pressure distribution bed with at least 4 feet of vertical separation without a TS 2 pretreatment system, also allowed.
			2) Performance assurance of treatment system	**2a)** Management program established, which assures the on-going proper operation and maintenance of the system.
			3) Extra protection of soil during construction to limit damage to infiltrative surface	**3a)** Site preparation, excavation, placement of gravel, and backfilling operations done with the proper equipment and care. Only low load-bearing construction equipment to be used in the bed area to limit soil compaction.
				3b) Construction proceeds only during low soil moisture content conditions (below its plastic limit). Once exposed, infiltrative surface covered within 12 hours to prevent desiccation or before periods of precipitation to prevent puddling.

*** The local health officer may require additional site-specific issues and criteria to consider, and mitigation measures.**

Section 4: Waiver Reporting

Waiver Approval Form

This single page document is the primary waiver recording form and contains the following information (See Appendix B - Request for Wavier from State Regulations form):

- Basic permit data (applicant name, site address, designer name, etc.);
- Specific rule/requirement waived (section and subsection of Chapter 246-272 WAC);
- Site/design/administrative mitigation measures proposed and any additional evaluation criteria and/or mitigation measures employed; Type of Waiver (Class A, B, or C);
- Confirmation of adjacent or affected property owner notification (if appropriate); and
- Approval signature (by qualified/authorized local health agency personnel).

This form is completed whenever a wavier of state regulations is requested.

Local Record-Keeping / Data Management

The local health officer is required to maintain complete and retrievable records of all waivers reviewed, granted or denied. Individual waiver request forms / records are, at minimum, to be filed with the sewage system permit records. A copy of the waiver request form may also be filed in a separate file as an on-going record of waivers reviewed, approved or denied. Electronic record keeping may also be used to track and retrieve information regarding waivers.

Quarterly Reports Form Local Health Officer to DOH

Both the statue and WAC 246-272 requires that the Local Health Officer report quarterly to DOH regarding the waiver request activity (any waiver approved or denied) within their jurisdiction.

Report Schedule

First Quarterly (January - March)	Due April 15th
Second Quarterly (April - June)	Due July 15th
Third Quarterly (July - September)	Due October 15th
Fourth Quarter (October - December)	Due January 15th

Report Format

Each Quarterly Report is to consist of the following items:

- Copies of each complete wavier application acted on during the time-period of the report. "acted on" means reviewed and either approved or denied. Waiver requests received but pending review or decision will be reported in subsequent reports.

- A Quarterly Report Coversheet, with the signature of the Local Health Officer or authorized local health agency supervisory personnel, to indicate that the local health officer is adequately informed regarding waiver activity (See Appendix B - Quarterly Report).

DOH Review / Technical Assistance / Assurance

The Department of Health is available for consultation and technical assistance at any point in local health officer review and decision-making processes. Inquiry and discussion prior to granting waivers is encouraged when questions or issues arise. This is particularly true for Class C waivers.

The method for assuring that waivers of state regulations are consistent with public health protection has changed. Nonetheless, the DOH has a principal role in the assurance of consistent and appropriate extension of public health protection in all local health jurisdictions. To that end, DOH will review the Local Health Officer's quarterly reports regarding their waiver review and granting activity. It is anticipated that a more comprehensive oversight will be provided through periodic local on-site sewage program reviews, as opposed to response to received problems or complaints. DOH, however, will respond to non-agreement or non-compliance issues as they arise.

Assembly / How the Components Link Together

- Flow Chart: A comprehensive Flow Chart presents the three primary process routes for waiver of state regulations. As this chart presents all of the information together to show the interrelationships, the reader is encouraged to study the chart section-by-section, by class of waiver. The chart format is "decision-tree" -- that is, a question leads the reader depending upon the answer, "Yes" or "No" (See Figure 1 - Evaluation of Site-By-Site Waiver Request of State Regulations).

- Reference Materials: The various reference materials provided in **Referenced Standards and Technical Material for On-Site Sewage Systems** notebook supports the Class A mitigation measures found in Tables 1-4. Most of the materials are technical in nature, which are based on standard engineering and industry practice, intended to provide uniformity of practice. In addition, terms used in this document which need definition or clarification are provided in Appendix C of Section 5- Glossary of Terms.

Appendix A - Statutory Authority and Regulations Pertaining To Waivers

RCW 70.05.072 Local health officer−Authority to grant waiver from on-site sewage system requirements. The local health officer may grant a waiver from specific requirements adopted by the state board of health for on-site sewage systems if:

(1) The on-site sewage system for which a waiver is requested is for sewage flows under three thousand five hundred gallons per day;

(2) The local health officer on an individual, site-by-site basis evaluates the waiver request;

(3) The local health officer determines that the waiver is consistent with the standards in, and the intent of, the state board of health rules; and

(4) The local health officer submits quarterly reports to the department regarding any waivers approved or denied.

Based on review of the quarterly reports, if the department finds that the waivers previously granted have not been consistent with the standards in, and intent of, the state board of health rules, the department shall provide technical assistance to the local health officer to correct the inconsistency, and may notify the local and state boards of health of the department's concerns.

If upon further review of the quarterly reports, the department finds that the inconsistency between the waivers granted and the state board of health standards has not been corrected, the department may suspend the authority of the local health officer to grant waivers under this section until such inconsistencies have been corrected.

WAC 246-272-25001 Waiver of state regulations. (1) For individual, site-by-site waiver requests, if concurrence is granted by the department, the local health officer may grant a waiver from specific requirements in this chapter for OSS under three thousand five hundred gallons per day only after the following procedure has been completed:

(a) The applicant submits a waiver application to the local health officer, including justification describing how the requested waiver is consistent with purpose and objectives to meet the public health intent of this chapter;

(b) If the local health officer determines that the waiver is consistent with the standards in and the intent of this chapter;

(c) On a quarterly basis, the local health officer will forward to the department any approved or denied waivers for their records.

(2) The department may grant a waiver from specific requirements in this chapter for a LOSS if a person submits a completed departmental waiver application and required fee to the department, including justification showing the requested waiver is consistent with the LOSS standards in this chapter, and is consistent with the purpose and objectives of this chapter to assure public health protection.

(3) If an applicant desires to modify and resubmit a previously denied waiver request, the process described above in subsection (1) of this section for OSS under three thousand five hundred gallons per day, or subsection (2) of this section for a LOSS shall be followed again.

Appendix B – Waiver Forms

On-Site Sewage Systems (Chapter 246-272 WAC)
Waivers From State Regulations

Quarterly Report

TO: Washington State Department of Health
On-Site Sewage System Waivers
P.O. Box 47825
Olympia WA 98504-7825

FROM: _____
_____
_____
_____

Copies of Waiver Request Forms and this transmittal sheet are to be submitted by the Local Health Officer to the Washington State Department of Health for each quarter of the year. Submittal of this information is part of the process required under 70.05 RCW for waivers of state regulations granted by the Local Health Officer.

Year:

☐ 1999	☐ 2000
☐ 2001	☐ 2002
☐ 2003	☐ 2004
☐ 2005	☐ 2006
☐ 2007	☐ 2008

Quarter:

☐ 1st (January – March)	[Due April 15]
☐ 2nd (April – June)	[Due July 15]
☐ 3rd (July – September)	[Due October 15]
☐ 4th (October – December)	[Due January 15]

With this transmittal sheet are copies of the Requests For Waiver From State Regulations for On-Site Sewage Systems (Chapter 246-272 WAC) received and either approved or denied during the indicated year and quarter.

These waiver requests were reviewed, and approved or denied in full compliance with the provisions of the Washington State Board of Health's on–site sewage system rules.

Where waivers have been granted, the conditions, comments, requirements and mitigation measures have been evaluated for their ability to provide public health protection at least equal to that provided by Chapter 246-272 WAC On-Site Sewage Systems.

All waivers granted under these provisions have been evaluated and approved either by the Local Health Officer or persons specifically authorized by the Local Health Officer.

_____ _____

Local Health Officer **Date**

On-Site Sewage Systems (Chapter 246-272 WAC)
Request for Waiver From State Regulations

Section I.	*(completed by applicant)*
Name: ***(1)***	Local Health Department / District ***(2)*** *(see instructions)*
Address:	
Telephone: ( )	
Signature:	

Property Identification: ***(3)***

Section II.	*(completed by applicant)*	
WAC Number**:** ***(4)***	WAC Requirement: ***(5)***	Waiver Sought: ***(6)***
246-272 —		
Subsection:		

Justification *(mitigation measures to be provided)*: ***(7)***

Section III.	*(completed by health officer)*
Review Criteria: ***(8)***	Mitigation Measures *(in addition to those proposed)*: ***(9)***

Comments / Conditions: ***(10)***

Type of Waiver: ***(11)***] Class A] Class B] Class C — Request DOH review before granting? Yes ___ No ___

Neighbor Notification: ***(12)***

Required? Yes ___ No ___ *If needed, are agreements, easements, etc. properly filed?* Yes ___ No ___

Section IV.	*(completed by health officer)*

This Request For Waiver From State Regulations has been reviewed according to the provisions of Chapter 246-272 WAC On-Site Sewage Systems. The review criteria applied, and the mitigation measures proposed and/or required, have been evaluated for their ability to provide public health protection at least equal to that provided by this chapter WAC.

] Denied **] Approved / Granted** —Subject to all comments, conditions and requirements noted in Sections II and III.

Local Health Officer ***(13)*** _____ **Date:** _____

Instructions for Completion

Sections I and II are to be completed by the Applicant.
Sections III and IV are to be completed by the Local Health Officer or his/her authorized representative.

Most items in each Section are followed by a number in ( ). The instructions below are listed by these numbers:

(1) Individual requesting waiver. (Presumed to be property owner..., indicate if not.) Be sure to include mailing address and phone number.

(2) Local Health Department. Usually this will be "filled in" by the local health agency office.

(3) Property Identification: Provide the address, parcel number, permit application number or other identifying description of the property for which a waiver is being requested. A full legal description is not required.

(4) WAC Number. Specify the particular WAC number from Chapter 246-272 WAC for which a waiver is being sought, such as "WAC 246-272-140(1)".

(5) WAC Requirement. State the requirement in the specified WAC for which a waiver is being sought, such as "100 foot setback from SSAS to a well".

(6) Waiver Sought. Briefly describe the waiver sought, such as "Reduction of setback to 70 feet".

(7) Justification. Provide the rationale for the waiver request. What site conditions, system design characteristics, etc. mitigate the concerns that resulted in the requirements in the WAC? Technical justification should include supporting data, plat plans, device or treatment methodology proposed, possible mitigating site characteristics, gross land area, other options explored, and any other pertinent data. Possible mitigation measures may include system design, site requirements, or administrative approaches. Attach additional pages, if necessary to provide the local health officer adequate information upon which to make an informed decision.

(8) Review Criteria. Indicate when specific criteria were used in the review of the proposed waiver and mitigation measures.

(9) Mitigation Measures. Indicate any mitigation measures required in addition to those proposed by the applicant.

(10) Comments / Conditions. Briefly describe any concerns or issues regarding the waiver request, mitigation measures, or related issues.

(11) Type of Waiver. Indicate which category of waivers this particular request is in. For Class C Waivers, indicate if DOH review is to be requested before a decision is made to grant the request.

(12) Neighbor Notification. Are there any aspects of this waiver request for which notification to and/or permission by, adjoining or nearby property owners / dwellers would be appropriate?

(13) Local Health Officer. This is where the Local Health Officer, or his/her authorized representative, by checking the appropriate box and signing, grants or denies the requested waiver.

Assistance for applicants requesting a "Waiver From State Regulations" may be obtained from the Local Health Department or District.

Local Health Department / District Health Officers may obtain assistance from the Washington State Department of Health in their review of proposed "Waiver From State Regulations":

(360) 236-3041 / John Eliasson

Appendix C - Glossary of Terms

ACI: American Concrete Institute.

Approved List: "List of Approved Systems and Products", developed annually and maintained by the department and containing the following:
(a) List of proprietary devices approved by the department;
(b) List of specific systems meeting Treatment Standard 12 and Treatment Standard 2.
(c) List of experimental systems approved by the department;
(d) List of septic tanks, pump chambers, and holding tanks approved by the department.

ASTM: American Society for Testing and Materials.

Aquitard: A semi-permeable (low porosity) or impermeable geologic layer that impedes vertical movement of groundwater and acts as a confining layer to an aquifer. It may include the following materials: hardpan, silt, clay, till, or massive bedrock.

AWWA: American Water Works Association.

Casing: A metal or plastic pipe where a PVC pressure transport or gravity collection line is installed inside for additional protection in case of line failure or leakage.

Casing Spacers / Skids: Pipe fittings used to provide support around the circumference of a PVC pressure transport or gravity collection line within a casing through the full length of the casing.

Confining Layer: A layer of impermeable material adjacent to an aquifer that hampers the movement if water into or out of the aquifer.

Desiccation: Thorough removal of water from a soil by drying.

Disposal Component: A subsurface absorption system (SSAS) or other soil absorption system receiving septic tank or other pretreatment device effluent and transmitting it into original, undisturbed soil.

Flexible Coupling: A device used to form a leakproof joint between sections of plain end pipe or fittings of the same or different materials, of the same or different size, or any combination of materials or pipe sizes.

Hydraulic Conductivity: The ability of soil to transmit liquids through pore spaces in a specified direction, e.g., horizontally or vertically.

Hydrogeologic Characteristics: Characteristics that describe the hydrology (the distribution of water on the surface and below the ground) and the geology (the structure and content of the earth) at a site. Hydrogeologic characteristics include soil type, depth to ground water, soil permeability, and ground-water recharge rate. These properties control the entrance of water to the subsurface and the capacity to hold, transmit, and deliver water.

Hydrogeologic Susceptibility: Hydrogeologic characteristics that would either impede or enhance the movement of contaminants from the land surface into groundwater or surface water.

Hydrostatic Pressure: The pressure per unit area exerted by water at rest.

IAPMOSPS: International Association of Plumbing & Mechanical Officials Material & Property Standard for Prefabricated Septic Tanks.

JARPA: Joint Aquatic Resource Permits Application, which can be used to apply for Hydraulic Project Approvals, Shoreline Management Permits, Approvals for Exceedance of Water Quality Standards, Water Quality Certifications, and U.S. Army Corps of Engineers Section 404 and Section 10 Permits.

Load-bearing: The ability to support superimposed loads without shear failure or excessive deformation within the soil mass.

Local Health Officer: The health officer of the city, county, or city-county health department or district within the state of Washington, or a representative authorized by and under the direct supervision of the local health officer, as defined in chapter 70.05 RCW.

Plastic Limit: The moisture content at which a soil changes from a semisolid to plastic consistency; characterized by a soil just beginning to crumble when rolled into a wire approximately 1/8 in. in diameter.

Performance Standard: A standard used to judge whether predetermined requirements have been met, such as the necessary level of treatment for waste stream, after the completion or initiation of operation. Performance standards generally are in the form of a pre-determined level or concentration of a particular compound or constituent that is allowed in a waste effluent.

Puddling: Act of destroying soil structure, usually by disturbing or compacting the soil at high water content, thereby reducing porosity and permeability.

Sanitary Control Area: A horizontal protective radius around a well, which excludes major potential contaminant sources.

Sewage Tanks: Prefabricated or cast-in-place septic tanks, pump/dosing tanks, holding tanks, grease interceptors, recirculating gravel filter tanks , which are on the "Approved List", and any other tanks as they relate to on-site wastewater systems including tanks for use with proprietary devices.

Slope Stability: The resistance of an inclined surface to failure by sliding or collapsing.

Soil Compaction: Increasing the soil bulk density, and concomitantly decreasing the soil porosity, by the application of mechanical forces to the soil. Results in a soil that retains less water and resists root penetration. Soils with high clay content are more easily compacted than sandy soils.

Treatment Standard 1: A thirty-day average of less than 10 mg/l of BOD_5 and 10 mg/l of total suspended solids and a thirty-day geometric mean of less than 200 fecal coliform/100 ml.

Treatment Standard 2: A thirty-day average of less than 10 mg/l BOD_5 and 10 mg/l of total suspended solids and a thirty-day geometric mean of less than 800 coliform/100 ml.

Vertical Separation: The depth of unsaturated, original, undisturbed soil of Soil Types 1B-6 between the bottom of a disposal component and the highest seasonal water table, a restrictive layer, or Soil Type 1A.

Waterproof Surface Barrier: A barrier material applied for treating concrete surfaces to prevent leakage into a retaining structure or to prevent loss of water from a retaining structure.

WSDOT: Washington State Department of Transportation.

Zone of Aeration: That part of the ground in which the voids are not continuously saturated.

Zone of Influence: The area surrounding a pumping well within which the water table or potentiometric surfaces have been changed due to groundwater withdrawal.

References

1. ***Criteria for Sewage Works Design,, December 1998***,Publication No. 98-37 WQ Washington State Department of Ecology, P.O. Box 47600, Olympia, WA 98504-7600.

2. ***Guidance Handbook for On-Site Sewage System Monitoring Programs in Washington State, 1996,*** Washington State Department of Health, P.O. Box 47826, Olympia, WA 98504-7826.

3. ***Handbook of PVC Pipe Design & Construction, Third edition, 1991***, Uni-Bell Plastic Pipe Association, 2655 Villa Creek Drive, Suite 155, Dallas, TX 75234-7362.

4. ***Management Options for Unstable Bluffs in Puget Sound, Washington, Coastal Erosion Management Studies Volume 8,*** Shorelands and Water Resources Program, Washington Department of Ecology, P.O. Box 47600, Olympia, WA 98504-7600.

5. ***PVC Pipe - Design and Installation, AWWA Manual M23,*** American Water Works Association. P.O. Box 19581, Portland, OR 97208.

6. ***Testing Reinforced Concrete Structures for Watertightness, ACI 350.1R-93/AWWA 400-93,*** ACI Committee 350 report/AWWA Committee 400, American Concrete Institute, P.O. Box 9094 Farmington Hills, MI 48333.

7. ***1997 Uniform Plumbing Code,*** International Association of Plumbing and Mechanical Officials. 20001 Walnut Drive South, Walnut, CA 91789-2825.

8. ***WSDOT 1998 Standard Specifications for Road, Bridge, and Municipal Construction M41-10,*** Department of Transportation, P.O. Box 47300, Olympia, WA 98504-7300.